

## PLASMA PROCESSING SYSTEM WITH DYNAMIC GAS DISTRIBUTION CONTROL

### ABSTRACT OF THE DISCLOSURE

5        A plasma processing system that includes a plasma processing chamber that  
provides enhanced control over an etch process is disclosed. The plasma  
processing chamber is connected to a gas flow system. The gas flow system can be  
employed to control the release of gases into different regions within the plasma  
processing chamber. In addition, the volume of the released gas, e.g., the flow rate  
10      of the gas, can be adjusted by a gas flow control mechanism. In this manner, both  
the position and the amount of the gas that is delivered to the plasma processing  
chamber can be controlled. The ability to adjust the position and the amount of gas  
that is released into the plasma processing chamber provides for a better control  
over the distribution of the neutral components. This in turn enhances control over  
15      the etching process.

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